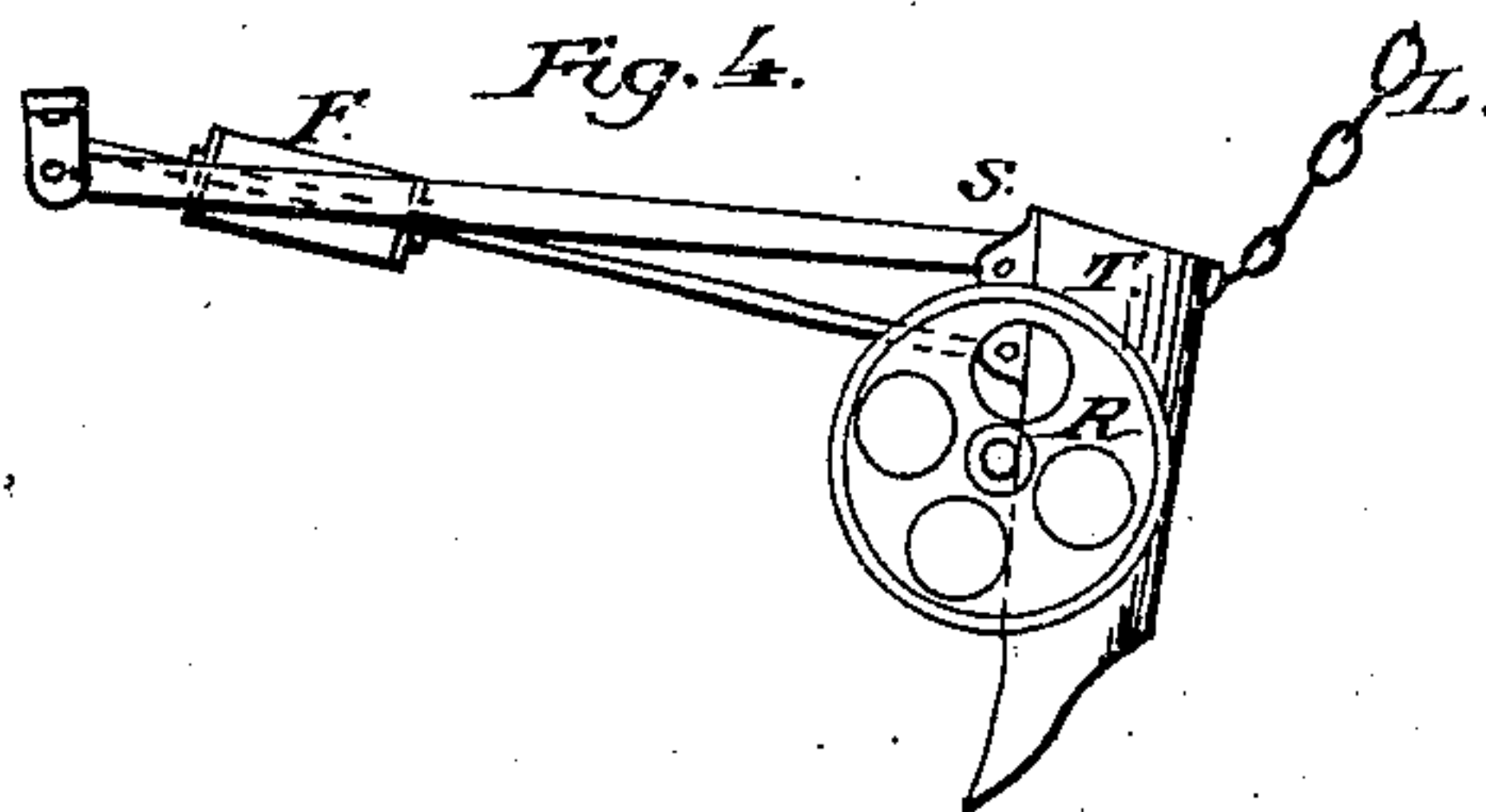
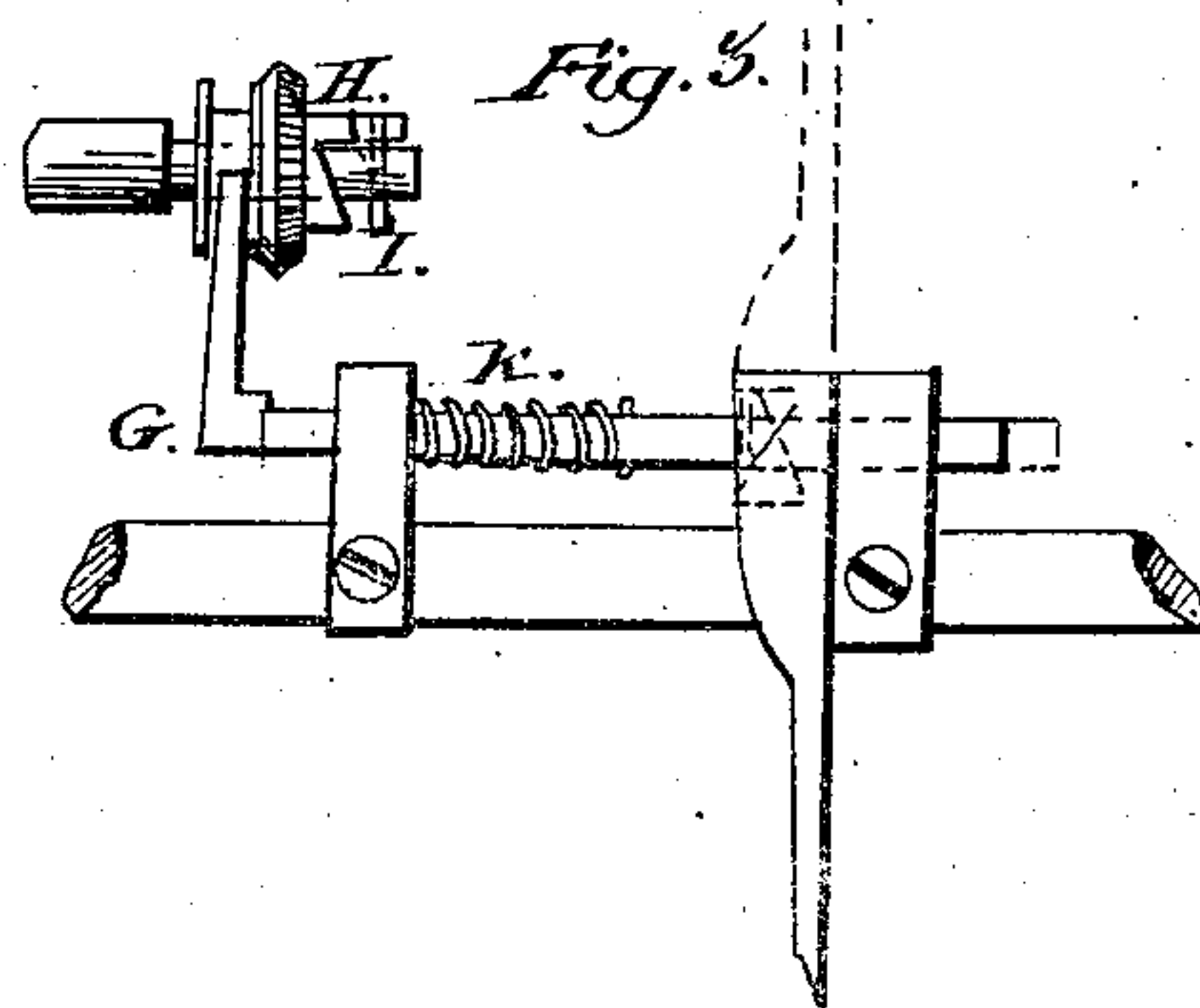
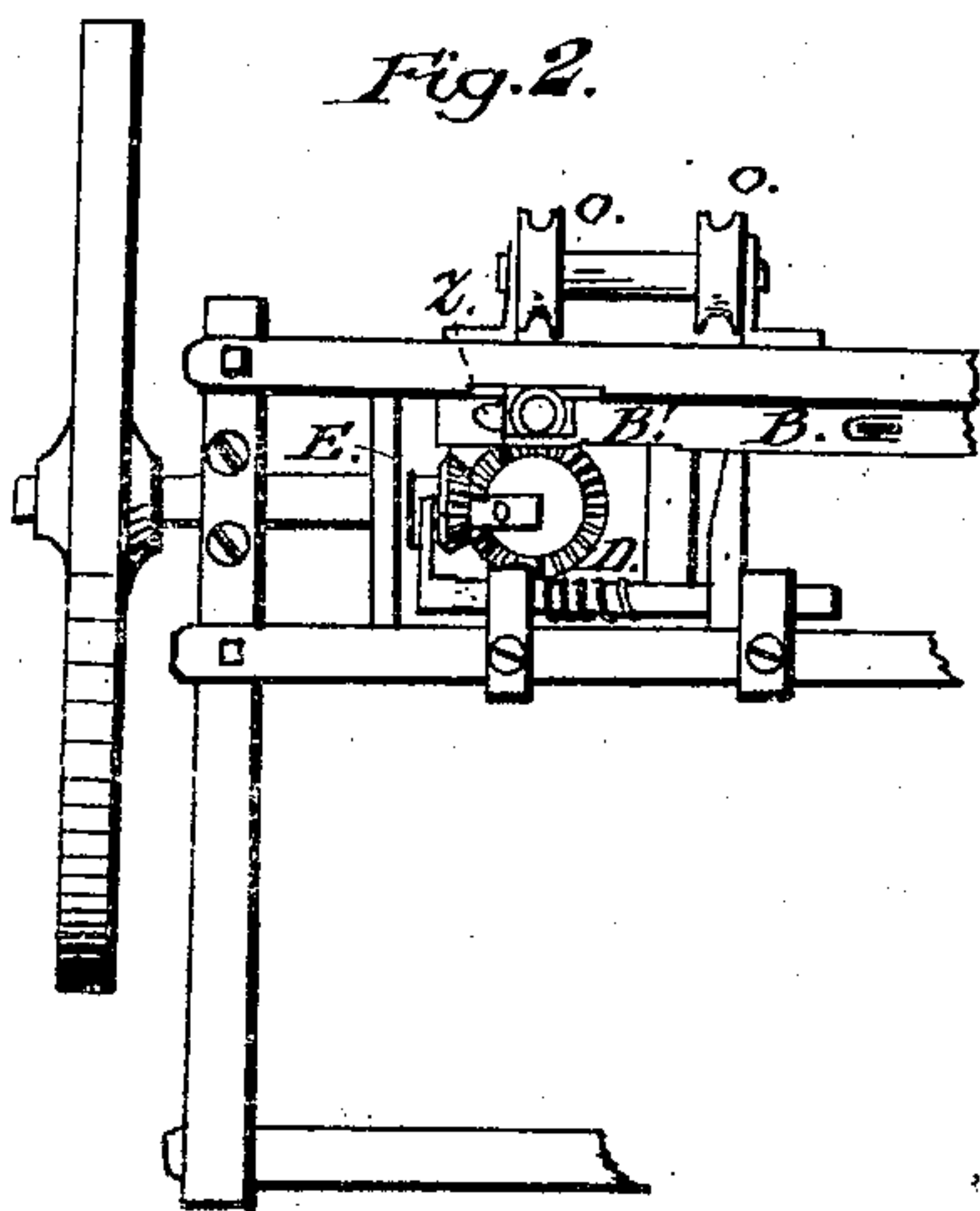
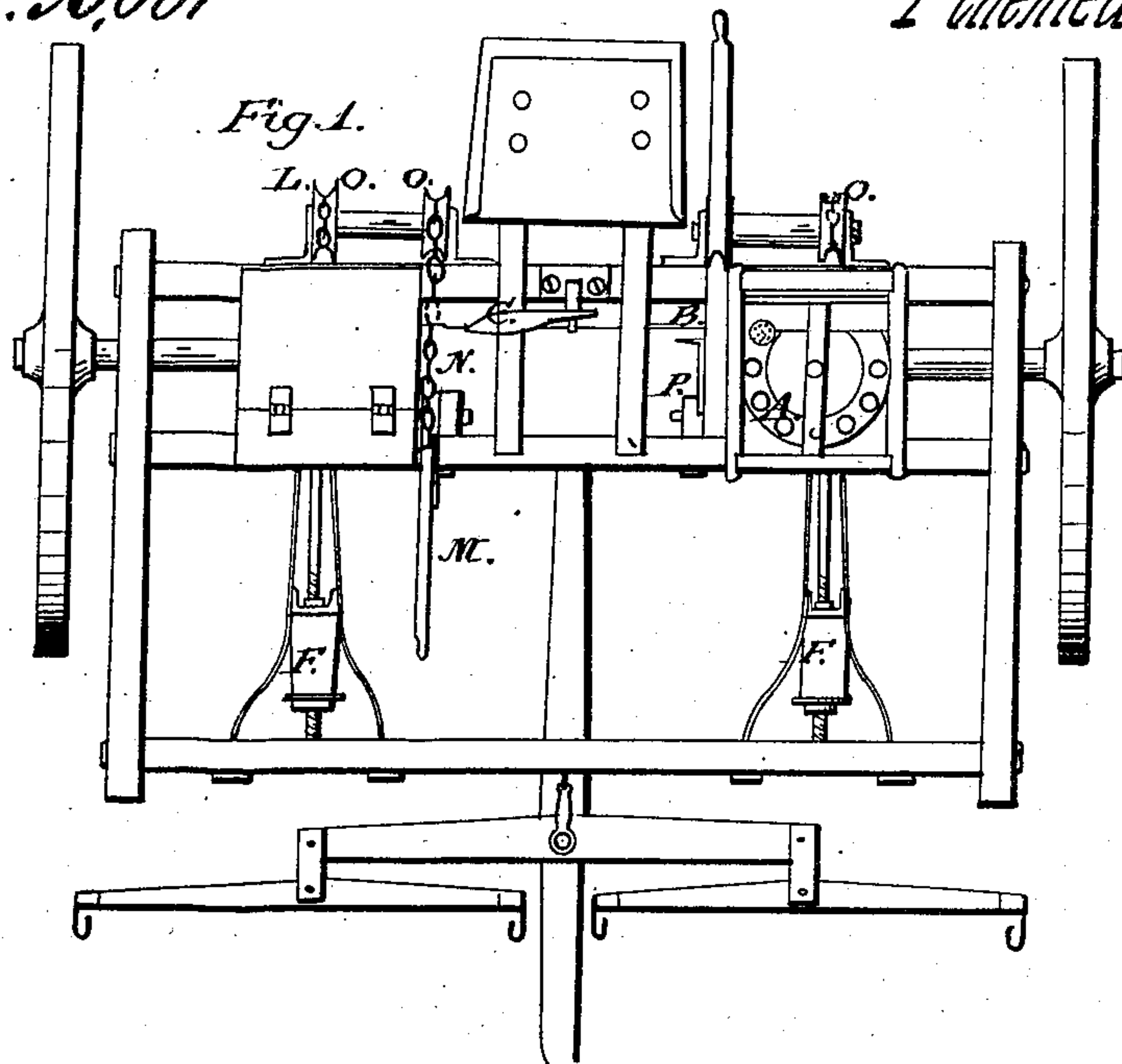


J. J. Harpel,

Corn Planter.

No. 95,681

Patented Oct. 12. 1869.



WITNESSES;

J. Dennis jr.
W. H. Dennis

INVENTOR:

Jacob J. Harpel
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Attorney.

United States Patent Office.

JACOB J. HARPEL, OF LEBANON, PENNSYLVANIA.

Letters Patent No. 95,681, dated October 12, 1869.

IMPROVEMENT IN CORN-PLANTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, JACOB J. HARPEL, of Lebanon, in the county of Lebanon, and State of Pennsylvania, have invented a new and useful Improvement in Corn-Planters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the accompanying drawings—

Figure 1 is a top view of my improved corn-planter.

Figure 2 is a bottom view of a detached part of the machine.

Figures 3 and 4 are also detached views.

My corn-planter is intended to plant two rows of corn at the same time. The travelling-wheels and main frame may be of any suitable form, as seen in fig. 1, where one of the seed-boxes is represented as open, in order to show the feed-wheel A, provided with holes, to measure the amount of seed for each hill. From the holes in this feed-wheel, the corn falls into the hole or slot B', in the reciprocating feed-slide B, fig. 2. This slide is moved back and forth by the lever C, and drops a hill at each stroke of the lever, either to the right or left.

The feed-wheel A is attached to a bevel-gear wheel, D, which engages with another bevel-gear wheel, E, upon the axle of the driving or travelling-wheel of the machine, and thus the feed-wheel is set in motion.

This bevel-gear wheel E is put loosely on the axle, and locked thereto by cam and clutch H and pin I, operated by the coiled spring K and elbow-rod G, so that the gear-wheel will move when the machine goes forward, and rest when the travelling-wheel moves backward. Therefore, the dropping proceeds when the machine goes forward, but stops when the machine moves backward,

The boot is supported by chains L, and may be raised or lowered at pleasure, by the levers M, in connection with the chains L N and the pulleys O.

A hook, P, locks the lever M, and thus supports the boot.

In addition to the above arrangement, the boot is provided with a pair of adjustable wheels, R, connected by a short axle, bolted to the front of the boot. By this means, the depth to which the boot enters the ground is regulated by these small wheels.

The boot is also provided with a hinge, S, and a rubber spring, F, thus making the boot flexible, and capable of swinging back when the point of the boot strikes a stone or other obstacle, and completely prevent breaking the boot or other parts of the machine upon catching a stone. As soon as the boot passes the stone, the point of the boot is promptly brought to the working position.

Having thus described my invention,

I claim, and desire to secure by Letters Patent—

1. The combination of the cut-off B with the wheel A, so arranged as to stop the discharge of seed when the slide or cut-off is at rest, and during its stroke to let the seed pass through the slot B', by the operation of the seed-wheel A, substantially as set forth.

2. The wheels R and short axle fastened to the front of the boot, substantially as set forth.

3. The arrangement and combination of the pulleys O, chains L and N, lever M, boot T, and gum spring F, all constructed and operated substantially as set forth.

J. J. HARPEL.

Witnesses:

DANIEL BREED,
J. DENNIS, Jr.